AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Additionally, the status of each claim is indicated in a parenthetical expression following the claim number.

Claims 1-4, 6, and 8-13 remain.

Claims 5, 7 and 14-22 have been withdrawn by Restriction Election filed February 23, 2003.

Claims 1, and 10-13 are being amended. Changes are shown with deletions struckthrough or double bracketed and additions underlined.

WHAT IS CLAIMED IS:

1. (Currently Amended) A method for detecting non-responders to anti-TNF therapy with a TNF-binding protein, comprising testing an individual for homozygosity for at least one single nucleotide polymorphism in the gene coding for the TNF Receptor II.

2. (Original The method of claim 1, wherein anti-TNF therapy is infliximab therapy.

3. (Original) The method of claim 1, wherein anti-TNF therapy of Crohn's disease.

4. (Original) The method of claim 2, wherein anti-TNF therapy is therapy of Crohn's disease.

5. (Withdrawn) The method of claim 1, wherein the at least one single nucleotide polymorphism is nucleotide substitution T/G at position 587 from the transcription starting site in exon 6 of the gene coding for the TNF Receptor II.

6. (Original) The method of claim 1, wherein the at least one single nucleotide polymorphism is nucleotide substitution A/G at position 168 from the transcription starting site in exon 2 of the gene coding for the TNF Receptor II.

7. (Withdrawn) The method of claim 5, comprising identifying the mutation T/G at position 587 by a technique suitable therefor.

8. (Original) The method of claim 6, comprising identifying the mutation A/G at position 168 by a technique suitable therefor.

9. (Original) The method of claim 1, comprising the use of blood cells for providing DNA.

10. (Currently Amended) A method of diagnosis comprising: ~~Use of~~ using a polymorphism at position 168 (A/G) in exon 2 of the gene coding for the TNF Receptor II ~~for diagnostic purposes~~ to detect non-responders to anti-TNF therapy.

11. (Currently Amended) The [[use]] method of claim 10 in an inflammatory or malignant or other chronic disease.

12. (Currently Amended) The [[use]] method of claim 11 in Crohn's disease.

13. (Currently Amended) The [[use]] method of claims 10 in anti-TNF therapy.

14. (Withdrawn) Use of a polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF Reception II in Crohn's disease.

15. (Withdrawn) Use of a polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF Receptor II in anti-TNF therapy.

16. (Withdrawn) A kit comprising reagents tailored to identify the polymorphism at position 168 (A/G) in exon 2 of the gene coding for the TNF-Receptor II.

17. (Withdrawn) A kit comprising reagents tailored to identify the polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF-Receptor II.

18. (Withdrawn) A kit comprising reagents tailored to identify the polymorphism at position 168 (A/G) in exon 2 and the polymorphism at position 587 (T/G) in exon 6 of the gene coding for the TNF-Receptor II.

19. (Withdrawn) Gene having the nucleotide sequence identified in SEQ ID NO 51 or a nucleotide sequence coding for the same peptide or a peptide having the same immunological properties.

20. (Withdrawn) Gene having the nucleotide sequence identified in SEQ ID NO 53 or a nucleotide sequence coding for the same peptide or a peptide having the same immunological properties.

21. (Withdrawn) Peptide having the sequence identified in SEQ ID NO 52 or a peptide having the same immunological properties.

22. (Withdrawn) Peptide having the sequence identified in SEQ ID NO 54 or a peptide having the same immunological properties.